

## **REMARKS**

### **STATUS OF THE CLAIMS**

Claims 1-3, 8 and 15 were pending. Claim 1 has been amended as shown above to specify that the patient is a human, as described throughout the specification as filed, for example in the Examples. Claim 1 has also been amended to remove references to binding sites derived from monoclonal antibodies that may not recognize c-erbB-2, HMW mucin, HMW mucin II, and p-glycoprotein. Claim 15 has been canceled without prejudice or disclaimer. Applicant expressly reserves the right to pursue the subject matter canceled from the claims in a continuing application filed during the pendency of this application. Thus, claims 1-3, and 8 are pending as shown above.

### **REJECTIONS WITHDRAWN**

Applicants appreciate clarification that the rejection of claims 1-3, 8 and 15 under 35 U.S.C. 35 U.S.C. § 103(a) over Hseih-Ma, Weiner or Ring in view of Fanger and in further view of the U.S. Patent No. 6,054,561 (hereinafter "the '561 patent") has been withdrawn.

Applicants also appreciate withdrawal of the rejection of claims 1-3 under 35 U.S.C. § 112, first paragraph, enablement.

### **35 U.S.C. § 102(e)**

The pending claims were again rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 5,959,084 (hereinafter "the '084 patent"). (Final Office Action, paragraph 6).

Applicant again traverses the rejection.

As previously noted, to support an anticipation rejection based on inherency, the Office must provide factual and technical grounds establishing that the inherent feature necessarily flows from the teachings of the reference. *See, e.g., Ex parte Levy*, 17 USPQ2d 1461, 1464 (BPAI 1990). Inherency cannot be established by probabilities or possibilities. *See, e.g., Continental Ca Co. USA, Inc. v. Monsanto Co.* 20 USPQ2d 1746, 1749 (Fed. Cir. 1987).

Thus, in the pending case, the burden is on the Office to show that the step of administering bispecific antibodies in the amounts and formulations described in the references would necessarily and inevitably result in production of antibodies as claimed. The burden is not, as stated in the Office Action, on the Applicant to show that different amounts of the bispecific antibody are administered in order to kill cancer cells (as described in the '084 patent) as compared to inducing the production of antibodies (as claimed in the instant case).

In point of fact, the '084 patent does not inherently describe administration of bispecific antibodies as claimed because the administration step as described in this reference would not necessarily and inevitably result in the production of antibodies as claimed. The cited portions of the '084 patent, namely Example 12 at col. 24, line 63 through col. 25, line 35, are silent as to the amount of bispecific antibody administered (in order to kill cancer cells, not to produce antibodies as claimed). Indeed, the only amounts specified in the entire '084 patent are the amounts of armed effector cells to be administered to kill cancer cells. *See, e.g.*, Section 6 of the '084 patent beginning at col. 11, line 14. Simply put, there is nothing in the '084 patent that teaches the step of administering bispecific antibodies to a human patient in order to induce the production of antibodies as claimed. The Office has not demonstrated that administration of armed effector cells containing bispecific antibodies as set forth in the '084 patent would necessarily and inevitable result in induction of antibodies.

Accordingly, the '084 patent does not anticipate the pending claims and withdrawal of the rejection is requested.

### **35 U.S.C. § 102(b)**

The pending claims were also again rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Weiner. (Final Office Action, paragraph 7).

For the reasons detailed above with respect to the '084 patent, Weiner's disclosure of administering 100 µg of bispecific antibody (see, page 95, right column, 1<sup>st</sup> paragraph) to a mouse in order to kill cancer cells cannot inherently anticipate the pending claims because there is no evidence that administration of such amounts would necessarily and inevitable result in production of antibodies as claimed. Indeed, Applicant's disclosure teaches that dosages used are in the milligram range (page 24, lines 14-16) rather than in the microgram range as taught in Weiner (page 95, right column, line 4).

Furthermore, Weiner also fails to anticipate the pending claims, because Weiner discloses only administration of bispecific antibodies to mice with implanted tumors. In contrast, the pending claims relate to methods of which as amended above, specify that the induce production of antibodies against a cancer antigen by administering a bispecific antibody to a human patient.

Thus, Weiner fails, expressly or inherently, to disclose each and every element of the claimed methods and, accordingly, cannot anticipate the pending claims.

### **35 U.S.C. § 112, FIRST PARAGRAPH, ENABLEMENT**

Claim 15 was again rejected under 35 U.S.C. § 112, first paragraph as allegedly not enabled by the specification as filed. (Final Office Action, paragraph 8).

Applicants disagree with the rejection for the reasons of record. In any event, cancellation of claim 15, without prejudice or disclaimer to its reintroduction in a continuing application, obviates this rejection.

**35 U.S.C. § 112, FIRST PARAGRAPH, WRITTEN DESCRIPTION**

Claims 1-3 and 15 were again rejected under 35 U.S.C. § 112, first paragraph as allegedly not described by the specification as filed. (Final Office Action, paragraph 9). It is noted that the basis of this rejection was the previous amendment regarding the nature of the second binding site, which was alleged not be supported by the specification as filed. *Id.*

Without conceding the correctness of the Examiner's position and solely to expedite allowance of the claims, Applicant has amended the claims as suggested by the Examiner in order to overcome this rejection. Accordingly, the rejection has been obviated.

**35 U.S.C. § 112, SECOND PARAGRAPH**

Claims 1-3 and 15 were rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite in the characterization of the second binding site. (Final Office Action, paragraph 10).

For the reasons noted above, the amendment to claim 1 obviates this rejection and withdrawal thereof is respectfully requested.

**CONCLUSION**

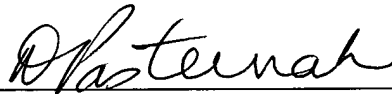
In view of the foregoing, Applicant submits that the claims are now in condition for allowance and requests early notification to that effect.

Please direct all further communications regarding this application to:

Lisa Alexander, Esq.  
CHIRON CORPORATION  
Intellectual Property - R440  
P.O. Box 8097  
Emeryville, CA 94662-8097  
Telephone: (510) 923-2585  
Facsimile: (510) 655-3542.

Respectfully submitted,

Date: March 8, 2005

By:   
Dahna S. Pasternak  
Registration No. 41,411  
Attorney for Applicant

CHIRON CORPORATION  
Intellectual Property - R440  
P.O. Box 8097  
Emeryville, CA 94662-8097  
Telephone: (510) 923-2585  
Facsimile: (510) 655-3542